## Allotment Evaluation (AE) For Garita Creek (#893)

Permittee		<u>Authorization Number</u> 3001569
Livestock Use	Preference AUMs	Allotment Active Suspended 00893 15 0
	Period of Use	Allotment Kind Season of Use Garita Creek 1 Cattle 03/01 – 02/28
	Kind of Livestock	Cow Calf
	Percent Public Land	AUMs are authorized at 100% public land
Allotment Profile	Physical Description	Allotment 893 is located approximately 7 miles southwest of Veriadero in San Miguel County, New Mexico. Elevation on this allotment is roughly 4,900 feet. Landforms on the allotment include; uplands. This allotment consists of two parcels.  One soil type is identified within the BLM parcels. Soils within the parcels are:  Conchas-Latom association, undulating. These soils consist of loam and sandy loams, with rooting depths approximately 20 to 40 inches. Parent materials of sandstone and shale comprise these soils. Average annual precipitation is around 16 inches. Hazards for erosion are moderate to high. Vegetation is characterized by blue grama, black grama, galleta, sideoats grama, little bluestem and juniper.
	Land Status Acreage	BLM State Private 0
	Management Objectives	The allotment is under a 'Custodial' ('C') management category. 'C' category allotments have evidence of a "not apparent" to "upward" long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.
	Key Forage Species	blue grama, black grama, little bluestem, galleta, sideoats grama
	Grazing System	Rotaional
Management Evaluation	Actual Use	Actual use reports were not submitted. Use was determined by billed AUMs.  AUMs Year non-use 2009
		non-use 2008 15 2007 15 2006 15 2005 15 2004

	15 2003
	15 2002
	15 2001
	15 2000
Utilization	Due to the lack of staff utilization studies have not been
	conducted. During the assessment visit it was determined that
	the allotment was receiving slight to moderate amounts of
	utilization.
Climate	The past water year (Oct. 1, 2008 – Sept. 30, 2009) the average temperature has been slightly above average (1 to 2 degrees Fahrenheit above average) and precipitation below average (4 to 6 inches below average). The winter was slightly drier (.75 to 1.5 inches below normal) and was warmer (2 to 3 degrees Fahrenheit above average). The spring was drier (1 to 1.5 inches below normal) and was warmer (0 to 2 degrees Fahrenheit above average). This should provide below average plant growth for cool season plants. The summer precipitation was below average (1.5 to 3 below normal) and slightly warmer (1 to 2 above normal) which should provide below normal growth for warm season plants.
	Climate change is a concern not only in New Mexico but globally. "Effects of increasing atmospheric CO <sub>2</sub> levels on plants are predicted to cause dramatic changes in native vegetation. Global climate change may accelerate rates of plant extinction, while ecosystem structure and function may shift. Ecological response to global changes in climate could shift ecosystems (i.e., shrublands replacing grasslands) and have effects, not only to an individual species, but to the ecosystem itself by additions and deletions of vegetation species" (Johnson, H.B., and H.S. Mayeux. 1992. Viewpoint: A view on species additions and deletions and the balance of nature. Journal of Wildlife Management 45:322-333.)
	We anticipate that our monitoring efforts will help indicate vegetation shifts, allowing for management modifications to address global climate change.
Trend	No long term trend plots have been established on this allotment.
	A Rangeland Health Matrix was completed on April 15, 2009. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are
	categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For

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		example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional.  Soil and Site Stability Four indicators were deemed None to Slight, three were deemed Slight to Moderate and three were deemed Moderate. Rating: 82%  Hydrologic Function Five indicators were deemed None to Slight, two were deemed Slight to Moderate and three were deemed Moderate. Rating: 84%  Biotic Integrity Seven indicators were deemed None to Slight and two were deemed Slight to Moderate. Rating: 95%  Overall Rating: 87%  Soils were rated at Proper Functioning Condition, Flora was
		rated at Proper Functioning Condition, and Biotic Fauna was rated at Proper Functioning Condition.
		Current livestock use does not appear to being having an adverse affect on rangeland health.
	Riparian	There are no riparian areas within the allotment.
	Wildlife	Seasonal home ranges in the allotment include those for antelope, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects.
		Antelope are browsers/grazers; however there is little dietary overlap between deer and cattle. Best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.
	Threatened and Endangered Species	It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.
		Special status species that are likely to be found on the allotment include bald eagle and ferruginous hawk.
Conclusions and		Overall, the allotment is in good condition with good diversity.

Recommendations	Monitoring will help establish true trend data and any possible
	changes in the future. It is recommended that grazing be
	renewed for another 10 years without any changes to the permit.

